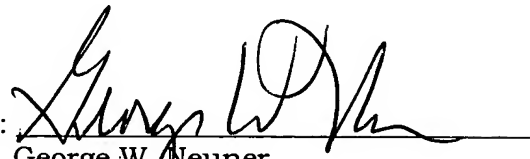


REMARKS

An early examination and notice of allowance are earnestly solicited. Should the Examiner wish to discuss any of the amendments and/or remarks made herein, the undersigned attorney would appreciate the opportunity to do so.

Respectfully submitted,

Date: 21 Dec. '01

By: 
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Appendix showing details of the Amendment

Claims 1-10 are cancelled.

11. A shank-end tool for the milling-type machining of chipless materials for the manufacture of molds, especially heat-resistant casting molds for producing metal castings, said tool comprising:

a shank portion having a longitudinal axis, a first end that can be connected detachably to a drive device and a second end with a groove-shaped recess extending in the longitudinal direction; and

a cutter blade in said groove and fixedly attached to the shank, said cutter blade having a flat leading face in a direction of advance during use,

wherein the cutter blade is provided with a wear resistant blade edge on the leading face.

12. A shank-end tool in accord with Claim 11, wherein the cutter blade is a flat blank of a material selected from the group consisting of steel, wear-resistant steel, or a wear-resistant material, and wherein said blade edge is at a right angle to the flat leading face.

13. A shank-end tool in accord with Claim 11, cutter blade further comprising a trailing edge behind the blade edge when viewed in the direction of advance, wherein the blade edge and the trailing edge are rounded.

14. A shank-end tool in accord with Claim 11, wherein the flat leading face of the cutter blade has a rounded corner or a corner cut at an angle.

15. A shank-end tool in accord with Claim 11, wherein the flat leading face of the cutter blade has an outer contour with a circular arc or conical shape.

16. A shank-end tool in accord with Claim 11, the cutter blade further comprises a curved surface having a convex face or a bent surface, parallel to the longitudinal axis, with the convex face of the curved surface or of the bend pointing in a direction of rotation of the shank in use.

17. A shank-end tool in accord with Claim 11, wherein the cutter blade further comprises shovel-like blade folds that are sloped with a blade angle relative to the longitudinal axis to produce fan-like action.

18. A shank-end tool in accord with Claim 11, wherein the cutter blade comprises a material selected from the group consisting of a metal, a high-strength elastically deformable material, and a springy material.

19. A shank-end tool in accord with Claim 11, wherein the cutter blade comprises a steel base material and is provided with a wear-protective covering on the leading flat face, the wear-protective covering being a material selected from the group consisting of a hard substance, a metal composite containing hard substances, and a metal alloy containing a hard substance.

20. A shank-end tool in accord with Claim 11, wherein the shank comprises a tubular or cylindrical hollow body at least at the second end.

21. A method for the milling-type machining of chipless materials for the manufacture of heat-resistant molds, said method comprising:
providing a shank-end tool comprising:

a shank portion having a longitudinal axis, a first end that can be connected detachably to a drive device and a second end with a groove-shaped recess extending in the longitudinal direction; and

a cutter blade in said groove and fixedly attached to the shank, said cutter blade having a flat leading face in a direction of advance during use,

wherein the cutter blade is provided with a wear resistant blade edge on the leading face:

machining a chipless material with the shank-end tool to provide a finished form.

22. A method for the milling-type machining of chipless materials in accord with claim 21, wherein the cutter blade is a flat blank of a material selected from the group consisting of steel, wear-resistant steel, or a wear-resistant material, and wherein said blade edge is at a right angle to the flat leading face.

23. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the cutter blade further comprises a trailing edge behind the blade edge when viewed in the direction of advance, wherein the blade edge and the trailing edge are rounded.

24. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the flat leading face of the cutter blade has a rounded corner or a corner cut at an angle.

25. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the flat leading face of the cutter blade has an outer contour with a circular arc or conical shape.

26. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the cutter blade further comprises a curved surface having a convex face or a bent surface, parallel to the longitudinal axis, with the convex face of the curved surface or of the bend pointing in a direction of rotation of the shank in use.

27. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the cutter blade further comprises shovel-like blade folds that are sloped with a blade angle relative to the longitudinal axis to produce fan-like action.

28. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the cutter blade comprises a material selected from the group consisting of a metal, a high-strength elastically deformable material, and a springy material.

29. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the cutter blade comprises a steel base material and is provided with a wear-protective covering on the leading flat face, the wear-protective covering being a material selected from the group consisting of a hard substance, a metal composite containing hard substances, and a metal alloy containing a hard substance.

30. A method for the milling-type machining of chipless materials in accord with Claim 21, wherein the shank comprises a tubular or cylindrical hollow body at least at the second end.